2010 APS/EMC Users Meeting — May 3-5, 2010

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The Trials and Tribulations of Double-Crystal Monochromator Design Jon Kelly

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"State of the art" double-crystal monochromator (DCM) design will be discussed. Every aspect of DCM design will be considered from basic mechanical properties, drive trains, encoders and stability to cooling schemes, crystal FEA, and control systems. The intention is to give an overview of the most important factors to consider when selecting a monochromator and good design practices for current and future sources.